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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/966,325

09/28/2001

Mark Sullivan

NIOC 7772

3172

321

7590

08/25/2005

SENNIGER POWERS LEAVITT AND ROEDEL
ONE METROPOLITAN SQUARE
16TH FLOOR
ST LOUIS, MO 63102

EXAMINER

LEVITAN, DMITRY

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/966,325

Applicant(s)

SULLIVAN, MARK

Examiner

Dmitry Levitan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 09/28/01
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Claim Objections

1. Claims 1-5 are objected to because of the following informalities: claims 1 and 4 limitation "a satellite transceiver" is unclear in the context of the claims, because it seems that the claimed satellite transceiver is not located at the satellite, but at the uplink station.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, because it is a hybrid claim comprising a method and computer-readable media. See *Ex parte Lyell* 17 USPQ2d 1548.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4 and 6 are rejected (as best understood) under 35 U.S.C. 103(a) as being unpatentable over Toporek (US 6,584,083) in view of Haldeman (US 6,801,576).

Toporek substantially teaches the limitations of claims 1, 4 and 6:

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A satellite uplink for use in connection with a system transmitting media content from first location to a second location (uplink of the satellite system shown on Fig. 1 and 5:6-18, interconnecting two satellite gateways 111A and 111B, operating as central gateways for other gateways to connect them through the satellite link 5:54-60), including a satellite communication link having a transmission propagation delay (satellite links with significant latency 2:38-43, wherein each satellite hop can have latency from 200 ms to 700 ms 10:58-11:2), a communication satellite (satellite on Fig. 1 and 2, 5:6-14),

An encoder encoding media content into a first format at the first location (inherently part of client computer 123 on Fig. 1, because encoding application programs run on the computer, as described on 1:47-67, into TCP/IP packets, disclosed on 5:28-36, is essential for the system operation), said format is being sensitive to the transmission propagation delay and requiring at least one transmission acknowledgement signal (TCP format problems with long latency typical for satellite link, including the protocol acknowledgements 4:27-44), the satellite uplink comprising:

A control processor (inherently part of satellite gateway 111A, because all gateways have processors) receiving media content in the first format and providing the at least one transmission acknowledgement signal to the encoder (satellite gateway 203 as shown on Fig. 2, receiving TCP/IP packets from client 201, including the protocol acknowledgements 4:27-44), said control processor converting the media content to a second format having a characteristic such that the second format is insensitive to the transmission propagation delay (converting the packets into a satellite protocol in translation module 231, the protocol designed to operate in long latency environment 10:58-11:2);

A satellite communication signal converter receiving the media content in the second format, said satellite communication converter converting the media content received in the second format to a satellite transmission signal compatible with the satellite communication link (inherently part of the satellite gateway 203, because physical layer 237 of satellite gateway 203 on Fig. 2, converting satellite protocol 233 into a signal for transmission to and from the satellite in a wireless medium 239 10:4-22); and

A satellite transceiver receiving the satellite transmission signal and transmitting the satellite transmission signal to the satellite over the satellite communication link (inherently part of ground station 107 on Fig. 1 and 5:12-18, because the ground station is in communication with satellite 101 over the satellite link 105) wherein the satellite downlinks the satellite transmission signal for the reception on the earth at the second location (ground station 108 on Fig. 1 and 5:4-18).

Also Toporek teaches transmitted media that includes graphics, text, sound, animation and real time communications 1:42-67.

Toporek does not teach media content as live media webcasting.

Haldeman teaches live media webcasting (live studio broadcasting distributed through a satellite 172 link and Internet to users 141, shown on Fig. 1 and 3:27-48).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add live media webcasting of Haldeman to the system of Toporek adding an important feature to the system, utilizing the system tolerance to the satellite latency, and making live broadcast available to remote users.

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In addition, regarding claim 4, Toporek teaches an uplink router (satellite gateway 111A integrated in a router 6:13-15) comprising a satellite transceiver (satellite ground station comprising a satellite modem 5:14-18, as the satellite modem is integrated with a satellite gateway 6:13-15).

5. Regarding claims 2 and 3 Toporek teaches the first format utilizes a TCP protocol having a first propagation delay tolerance less than the propagation delay of the satellite link (using TCP protocol 213 and 229 as shown on Fig. 2, wherein TCP delay tolerance is less than typical of satellite links 2:34-50) and wherein the satellite link acts as a TCP endpoint such that second format (conversion from TCP format into a satellite format, wherein satellite gateway is the satellite link endpoint as shown on Fig. 2), comprises modified TCP protocol having a second propagation delay tolerance in excess of the propagation delay is insensitive to the delay (modified TCP format suitable for satellite long latency, for example 200-700 ms 10:58-11:6).

6. Regarding claim 5, Toporek teaches an earth station in communication with satellite (satellite ground station 108 on Fig. 1, comprising satellite gateway 6:13-15), receiving the satellite transmission signal and converting it into a third digital webcast signal having the first digital webcast format (translation module 249 converting the satellite signal into a third signal having the first digital webcast format TCP on Fig. 2 and 10:23-36); and

A router receiving the third digital webcast signal and routing the third digital webcast signal to a wide area network (satellite gateway 205 integrated in a router 6:13-14, routing TCP packets to an Internet as shown on Fig. 1 and 2, 10:30-45, wherein 129 and 259 is Internet).

7. Regarding claim 7 (as best understood), Toporek teaches implementation of the method of claim 6 as computer executable instructions in a personal computer 6:3-12.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'DL' followed by a stylized name.

Dmitry Levitan
Patent Examiner.
08/16/05